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United States General Accounting Office

GAO

Report to the Secretary of Defense

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March 1986

EMERGENCY AIRLIFT

Responsiveness of the Civil Reserve Air Fleet Can Be Improved

CDD/ORIGINAL

GAO/NSIAD-86-47

GAO

United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-221193

March 24, 1986

The Honorable Caspar W. Weinberger
The Secretary of Defense

Dear Mr. Secretary:

This report discusses Civil Reserve Air Fleet activation issues. The report contains recommendations to you on pages 23 and 30.

As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Chairmen of the above mentioned committees and to the Chairmen of the House and Senate Committees on Armed Services. Copies are also being sent to the Director, Office of Management and Budget, and other interested parties.

Sincerely yours,

Frank C. Conahan

Frank C. Conahan
Director

Executive Summary

The Civil Reserve Air Fleet (CRAF) consists of commercial aircraft committed to support the Department of Defense (DOD) in a national crisis or war. In such an emergency, CRAF is expected to transport 95 percent of the troops and 27 percent of the cargo that would be transported by air.

Because of the extent of reliance to be placed on CRAF in the event of a national emergency, GAO reviewed the program to assess the ability of CRAF to respond to such an emergency. Specifically, GAO wanted to determine:

- Are DOD's efforts to assure that CRAF is ready for mobilization sufficient and effective?
- Are the commercial carriers prepared to support CRAF aircraft, particularly at foreign airfields?

Background

The Air Force's Military Airlift Command (MAC) manages the CRAF program for DOD. There are 281 long-range aircraft committed to CRAF by 19 carriers. When mobilized, CRAF aircraft are to be operated, managed, and supported by their companies. Upon receipt of mission assignments from MAC, the carriers are to provide aircraft and crews to perform the missions, facilities and personnel to plan and control the flights, and maintenance and logistics to insure mission accomplishment. Under the program, CRAF aircraft will get support services at foreign airfields from selected carriers.

The CRAF program provides DOD with emergency airlift capacity without having to buy aircraft, pay personnel costs, or fly and maintain the aircraft, during peacetime. Such costs could amount to billions of dollars annually. Carriers participating in the program receive no compensation unless mobilized. MAC specifies requirements in CRAF contracts to insure that carriers can respond when mobilized. A key requirement is the ability to supply management personnel and aircraft crews to support a 10 hour per day flying rate.

Results in Brief

It is uncertain whether CRAF can effectively meet DOD's mobilization requirements. Testing of the program by MAC through simulation and field exercises has been very limited. DOD has provided only limited mobilization planning data to CRAF carriers making it very difficult for the carriers to plan for utilization of the system in an emergency. This

particularly affects those carriers responsible for supporting CRAF aircraft at foreign airfields. MAC has not sufficiently monitored carrier compliance with contract provisions designed to help ensure effective mobilization.

An additional concern is that incompatibility of data communications services at some military airfields with existing commercial services could hinder effective communications between the aircraft and their operations centers in a mobilization.

Principal Findings

Testing

Large-scale testing of CRAF's ability to respond to an emergency is not practical. An alternative has been the use of simulations and field training exercises. The simulations have been conducted quite frequently by MAC (seven since 1982), but the last time carriers directly participated was 1976. The field training exercises are conducted annually, but they are not specifically designed to test the responsiveness of CRAF to an emergency.

Planning Data

CRAF aircraft generally fly 10 hours or more a day in normal operations, about the same as might be required in wartime. This, however, does not ensure effective mobilization. Several carrier officials said that more information on typical workload requirements, travel routes and aircraft service and maintenance requirements is needed by carriers to ensure effective plans and preparations for mobilization. MAC has withheld some of this type of information because of its national security classification.

Contractual Requirements

MAC has prescribed numerous contractual and procedural requirements for the carriers designed to help ensure an effective mobilization. For example, MAC requires that carriers have a minimum of four crews without military reserve commitments for each aircraft, that the crews and management personnel have security clearances, and that the crews be issued Geneva Convention cards prior to a mobilization. However, neither MAC nor the carriers know to what extent crew members have reserve commitments and have not stressed the importance of security clearances or the ability to rapidly issue Geneva Convention cards.

Data Communications

Most military bases do not have data communications systems linked to the commercial data service used by CRAF carriers. CRAF flight crews thus cannot easily communicate with their flight dispatch office to receive copies of flight plans.

Overseas Support

At overseas airfields CRAF may not get the support needed because responsible carriers are unaware of the estimated workload for each location. Having allies provide this support under host nation support agreements is an option that DOD has started to pursue.

Recommendations

To better ensure CRAF could be effectively mobilized in a national emergency, GAO believes actions are needed to emphasize the critical role of CRAF and the importance of being ready in the event of mobilization. GAO recommends that the Secretary of Defense require MAC to

- provide typical workload data to key carrier representatives and evaluate the carriers' abilities to perform their missions;
- assess CRAF capability using data obtained from the carriers and from field exercises and simulations;
- evaluate CRAF carriers' efforts to meet their contractual requirements;
- consider the need for additional data communications capabilities at key military airfields for use by CRAF carriers during a national emergency;
- provide carriers responsible for supporting CRAF aircraft overseas with the general workload data on the numbers and types of aircraft to be supported at each airfield; and
- fully consider CRAF overseas support requirements in negotiating host nations support agreements.

Agency Comments

In commenting on this report, DOD said it concurred in principle with GAO's conclusion that management attention is required to enhance the program. The Department said it will take appropriate steps to address the GAO recommendations.

GAO believes that actions the Department stated it recently took to supply information to carriers about the workload in a single theater scenario is a positive move to more realistic planning. GAO believes it is important that this data include information on the number and kinds of missions to be flown in a representative period of time.

DOD partially concurred with GAO's recommendation that carrier efforts to comply with contractual requirements be evaluated. DOD is concerned that mandatory compliance with requirements may prove detrimental to the program.

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Abbreviations

CRAF	Civil Reserve Air Fleet
DOD	Department of Defense
DOT	Department of Transportation
GAO	General Accounting Office
MAC	Military Airlift Command
OSD	Office of the Secretary of Defense
MOU	Memorandum of Understanding
MTM/D	Million ton-mile daily

Chapter 1

Introduction

The Civil Reserve Air Fleet (CRAF) consists of commercial aircraft committed to support the Department of Defense (DOD) during emergency conditions. U.S. air carriers participating in the CRAF program contract to provide aircraft, flight crews, and management personnel to supplement DOD's fleet of aircraft. The program provides DOD with emergency airlift capabilities without having to buy aircraft, pay personnel costs, or fly and maintain aircraft during peacetime. Such costs would amount to billions of dollars annually. Carriers receive no compensation for their participation until mobilized during an emergency. Since the inception of the program in 1952, CRAF has never been mobilized.

The Air Force's Military Airlift Command (MAC) manages the CRAF program for DOD. As the operating agency for airlift within DOD, MAC is responsible for developing airlift doctrine, strategy, and operation plans for the Office of the Secretary of Defense (OSD) through the direction of the Joint Chiefs of Staff. During periods of crises and war, MAC would plan and execute airlift missions.

Why CRAF Is Important

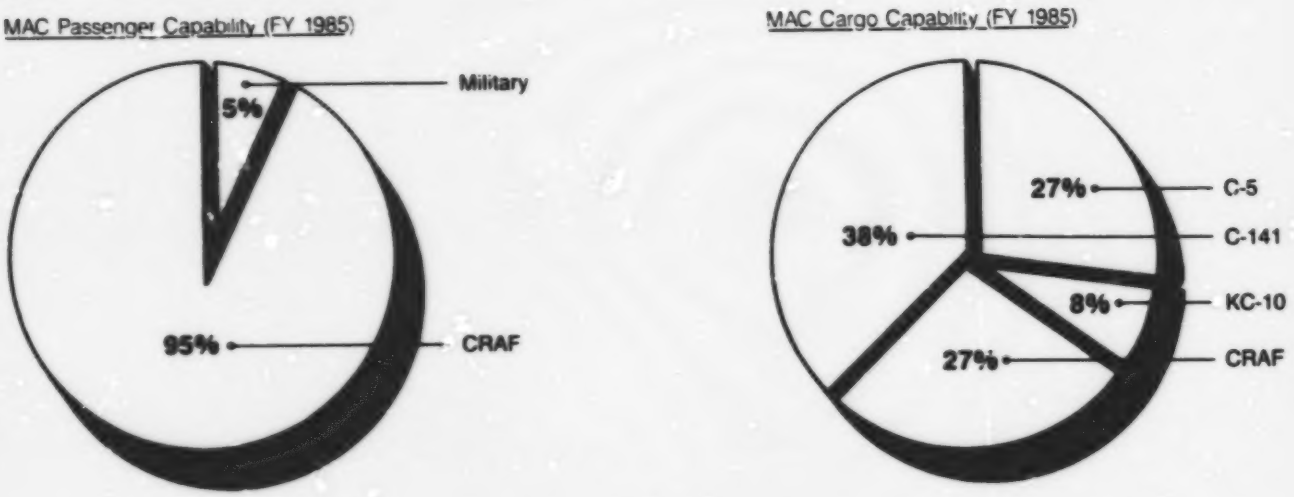
Current U.S. security policy dictates that the United States be prepared to move combat forces, equipment, and supplies to locations throughout the world. The most rapid movement of combat forces and their equipment is by air. Therefore, the immediate use of all suitable long-range aircraft, both military and civil, is essential.

The need for long-range international cargo airlift capability is well documented in DOD's planning efforts. MAC has indicated a need for up to 90 million ton-miles daily (MTM/D) when the requirements of more than one wartime scenario are considered. Subsequent to the April 1981 Congressionally Mandated Mobility Study, a minimum goal of 66 MTM/D of cargo capability was established by DOD.

Currently, the capability exists to airlift about 34.8 MTM/D during a national emergency. The DOD is relying on the CRAF to carry 9.4 MTM/D or 27 percent of the cargo. Air Force aircraft—the C-5, C-141, and KC-10s—would carry 25.4 MTM/D. The balance of 31.2 MTM/D represents a shortfall between current capability and the DOD established goal of 66 MTM/D.

Figure 1.1 shows the extent of MAC's reliance on CRAF aircraft to transport troops and cargo during a national emergency.

Figure 1.1: MAC's Reliance on CRAF



Actually CRAF will fly all of the missions transporting troops. No military airlift troop carrying missions are planned, but some troops will accompany their unit's cargo on long-range military C-5 and C-141 aircraft.

In March 1985, the CRAF program had a commitment of 281 long-range international aircraft suitable for CRAF missions. Most suitable long-range, international cargo aircraft owned or operated by U.S. air carriers are included in CRAF. MAC's own long-range international fleet consists of 345 aircraft.

History and Organization

At the time of the Korean War, the process of transferring commercial aircraft from their normal operations to military use involved delays and inefficiencies. As a result, in 1951 President Truman issued an executive order directing the Department of Commerce to formulate a plan for the use of civil airlift resources in times of crises to meet emergency defense needs. That executive order was implemented in 1952 by a Memorandum of Understanding (MOU) between the Department of Commerce and DOD establishing the CRAF. Currently, the MOU is between DOD and the Department of Transportation (DOT).

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MAC obtains the CRAF carriers' commitments for airlift resources under an annual contract with each carrier. On the basis of performance capabilities, MAC places CRAF aircraft into four segments.

Long-range international—This segment supports MAC's worldwide operation. Aircraft in this segment must be capable of over water operations and carry a useful payload. The present fleet consists of B-747, DC-8, DC-10, B-707, and L-1011 aircraft.

Short-range international—This segment accommodates short-haul operations from the continental United States to such near offshore locations as the Caribbean, Greenland, and Iceland.

Domestic—This segment supports DOD logistics requirements in the United States.

Alaskan—This segment satisfies intra-Alaskan airlift requirements for the Alaskan Air Command.

CRAF Activation and Concept of Operation

CRAF is to be activated during emergencies when DOD's aircraft are not sufficient to perform all required military operations. Although it has never been activated, CRAF is designed to be activated incrementally in three stages to provide a force tailored to respond to specific needs.

Stage I-Committed Expansion—Activated by the Commander-in-Chief of MAC. This stage would be considered a minor contingency in support of MAC's daily airlift requirements under peacetime conditions. CRAF aircraft are to be ready within 24 hours.

Stage II-Defense Airlift Emergency—Activated by the Secretary of Defense for an airlift emergency. Activation of Stage II would provide aircraft within 24 hours for support of a major airlift contingency not warranting full mobilization or declaration of a national emergency.

Stage III-National Emergency—Activated by the Secretary of Defense after a defense oriented national emergency has been declared by either the President or the Congress or under conditions outlined in the DOD/DOT MOU on CRAF. This stage represents the total airlift capability of CRAF with all aircraft ready for missions within 48 hours.

As of March 1985, 19 carriers had aircraft committed to the long-range international segment of CRAF. When mobilized, CRAF aircraft are to be

operated, managed, and supported by their companies. Upon receipt of mission assignments from MAC, the carriers are to provide aircraft and crews to perform the missions, facilities and personnel to plan and control the flights, and maintenance and logistics to ensure mission accomplishment.

MAC will provide basic mission information to the carriers by a commercial teletype system. This mission information will include onload/offload locations and times. It is the responsibility of CRAF carriers to do detailed mission planning, that is, dispatch the aircraft, schedule servicing stops, and plan for crew changes. Control of CRAF will be maintained by using existing commercial communication systems and procedures.

At 22 foreign airfields and 14 U.S. airfield locations (including Wake and Guam Islands), specific carriers have been designated as senior lodgers. A senior lodger is a U.S. carrier which generally has the greatest support capability at a specific airfield. During a national emergency, MAC can activate senior lodgers as needed. A senior lodger acts as the primary agent for any support services required by CRAF aircraft, whether providing services directly or acquiring them through alternative sources. At some foreign airfields, host nations will be specifically responsible for assuring needed support based on host nation agreements, which are being negotiated. Services required by CRAF aircraft consist of ground support, fuel, flight operations, traffic services, communications, supplies, maintenance, and accommodations for crew needs.

Objectives, Scope, and Methodology

CRAF plays a critical role in supplementing DOD's airlift resources during national crises and war. Because of its importance, we evaluated efforts by OSD and MAC to ensure that CRAF is prepared for mobilization. We did not address the ability of CRAF to sustain operations for an extended period of time. Issues addressed consisted of the following:

- Are efforts to plan for CRAF carrier mobilization sufficient and effective?
- Can CRAF carriers meet mobilization requirements including workload, communications, route planning, logistics, and crew support?
- Are senior lodger carriers prepared to support CRAF aircraft at foreign airfield locations?

Our review focused on the long-range international segment of CRAF. The short-range international, domestic, and Alaskan segments will also provide needed support during mobilization. However, the most critical military need is for long-range international airlift capability.

Our audit work was performed between June 1984 and March 1985 at Headquarters MAC, Scott Air Force Base, Illinois; 11 of the 19 carriers participating in the long-range international segment of CRAF; and 7 of the 22 foreign senior lodger locations. Senior lodger functions in the United States were not reviewed because these operations would not present the kinds of problems associated with operations in foreign locations. We held discussions with representatives of U.S. Forces Japan, the European Command, and U.S. Air Forces Europe on host nation support of CRAF aircraft at foreign airfields. We conducted a limited examination of host nation support agreements to ascertain if CRAF support was being considered during negotiation of the agreements. We also discussed aspects of CRAF with officials in DOD and DOT.

At MAC we obtained information on the overall program, examined applicable regulations, reviewed CRAF contracts, and discussed data obtained from the carriers and MAC.

The 11 carriers visited during our review control 247 of the 281 aircraft (88 percent) committed to the long-range international segment. Three of the 11 carriers visited are committed only to the Stage III-National Emergency phase of the program. The 11 carriers were visited during August, September, and October of 1984.

Table 1.1: CRAF Carriers Visited

Carrier	Location
American Airlines	Dallas, Texas
Arrow Air	Miami, Florida
Flying Tiger Line	Los Angeles, California
National Airlines	Jamaica, New York
Northwest Airlines	St. Paul, Minnesota
Pan American World Airways	Jamaica, New York
Rich International Airways	Miami, Florida
Transamerica Airlines	Oakland, California
Trans World Airlines	Jamaica, New York
United Airlines	Chicago, Illinois
World Airways	Oakland, California

We held discussions and obtained data at the 11 carriers on their mobilization planning, flying hours, crew status, and their ability to meet other contractual requirements. Much of the information obtained was from discussions and represented the views of the officials being interviewed.

The selection of overseas senior lodgers was based primarily on MAC identification of the most important locations and our review of MAC's expected workloads at senior lodger locations during a national emergency. Our discussions with senior lodger officials, which were held during October and November 1984, related to the carriers' preparation and capability to support all CRAF aircraft transiting each airfield.

Table 1.2: Senior Lodger Carriers Visited

Senior Lodger Carrier	Location
Pan American World Airways	Brussels, Belgium
Trans World Airlines	Cairo, Egypt
Pan American World Airways	Frankfurt, Germany
Trans World Airlines	London, England
Northwest Airlines	Copenhagen, Denmark
Northwest Airlines	Okinawa, Japan
Northwest Airlines	Tokyo, Japan

We did not assess data processing system controls and procedures related to outputs received from DOD systems and the commercial carriers. However, the information obtained was the best available, and was used by DOD and the carriers. Spot checks were made where possible. Our review was performed in accordance with generally accepted government auditing standards.

Efforts Should Be Increased to Ensure That CRAF Is Ready for Mobilization

CRAF is essential to the DOD warfighting capabilities because, in a national emergency, CRAF will transport almost all of the troops and over one-fourth of the cargo to be airlifted. There should be no question about the capability of CRAF to respond and overcome the major obstacles that may be present at the time of a national emergency. However, it is uncertain whether CRAF can effectively respond to DOD's mobilization requirements. Conditions which could hinder an efficient mobilization of CRAF include limited testing of the program's responsiveness to a national emergency, the lack of specific information for planning, and insufficient number of crew members with security clearances.

Management of CRAF

As the operating agency for airlift within DOD, MAC is responsible for developing airlift doctrine, strategy, and operation plans for war under the direction of the Joint Chiefs of Staff. MAC, as the manager of the CRAF program, is responsible for making sure CRAF can be efficiently mobilized. OSD involvement is limited and other than the MOU between DOD and DOT regarding the use of civil aircraft, we found no specific involvement by OSD in establishing or reviewing CRAF program policy and guidance. Recently, however, OSD did begin to take action to monitor MAC's efforts to have CRAF ready for mobilization. In November 1984, OSD asked the Logistics Management Institute to study the adequacy of U.S. carriers' capabilities to support CRAF operations during wartime. Institute officials estimate the study will be completed in June 1986. A phase I report, issued in April 1985, raised concerns about the support of CRAF at overseas locations and the need for DOD policy guidance. (See p. 27.)

To keep carriers informed of the program, MAC publishes all regulations, hosts annual conferences, and its personnel make occasional visits to CRAF carriers. The primary document that describes the CRAF program is MAC Regulation 55-8, "Operations, Civil Reserve Air Fleet (CRAF)." This document includes policies, mobilization procedures, and responsibilities of MAC and the CRAF participants. Also, MAC is in the process of preparing a document entitled "Crew Member Book," and a film on CRAF. These items will be provided to carriers to help familiarize their personnel with the CRAF program.

The annual CRAF conferences are for the benefit of air carrier officials designated as mobilization representatives by their respective companies. The conferences provide a forum for discussing changes in the CRAF program and addressing problems inherent in mobilizing CRAF. Our review of conference minutes for meetings held in 1982, 1983, and 1984 showed that, while a wide variety of subjects were discussed, the same

type of problems surface each year. These problems include issues discussed in the following sections of this report such as crews with military reserve commitments, security clearances for crew members, and accounting for and distributing Geneva Convention cards.

We recognize that, in peacetime, there is a delicate balance between the carriers and MAC and too great an emphasis on enforcement of requirements or excessive administrative demands could have a negative impact on the program. Participation in the CRAF program is voluntary and the leverage of MAC in peacetime is limited. There is no direct compensation to the airlines until mobilized. As a result, in many instances, MAC believes it can only suggest rather than direct compliance.

Testing of CRAF

It is recognized that it is impractical to fully test the ability of CRAF to respond to a national emergency. However, only limited testing has been done. The testing, directed by the Joint Chiefs of Staff, consists of two types: command post exercises which are simulations of conditions using computers that, in recent years, have not included CRAF carriers and annual field training exercises which provide valuable training experience but are not designed to test mobilization ability.

Command post exercises almost always assume that CRAF aircraft will be used. According to MAC officials, carriers were direct participants in only two exercises of this type—Cold Scarf V in March 1973 and Scarlet Scarf in April 1976. These exercises were used to test then current CRAF mobilization procedures at MAC Headquarters and carrier operations centers. Problems identified during these command post exercises were corrected and new procedures developed. Since 1982 seven additional command post exercises have been completed, but CRAF carriers did not participate because these exercises were primarily for the benefit of MAC in managing the flow of airlift missions.

Field training exercises primarily involve military personnel and aircraft, and frequently include commercial aircraft to provide additional airlift capability. These exercises are not specifically designed to test the ability of CRAF to respond to a mobilization and the CRAF aircraft used are provided under the regular peacetime airlift arrangements between MAC and the carrier. MAC officials said that CRAF carriers have gained valuable experience in field training exercises since these exercises usually entail flying between military airfields in the United States and overseas.

Contractual Requirements

In order to help ensure that CRAF can be effectively mobilized in an emergency, MAC has prescribed numerous contractual and procedural requirements for CRAF carriers. For example, MAC specifies expected utilization rates, and it requires CRAF carriers to (1) have a minimum of four crews without military reserve commitments per aircraft committed to the CRAF, (2) obtain security clearances for crew members and management personnel, (3) have Geneva Convention cards issued 48 hours after mobilization, and (4) maintain a navigation route kit for each CRAF aircraft. We believe that, in most of these areas, MAC could do more to help ensure an effective mobilization of CRAF.

Utilization Rates

MAC contracts with CRAF carriers specify a capability for a minimum utilization rate of 10 hours per aircraft per day upon mobilization. MAC does not assess the ability of CRAF to perform at this rate in the event of a national emergency. It is assumed that since most CRAF carriers routinely exceed in peacetime what is expected of them in wartime, the rate can be achieved.

In our visits to CRAF carriers, we confirmed that the 10 hours is a reasonable expectation. Utilization rates we examined for various periods between January and September 1984 showed rates ranging from 4.0 to 13.4 hours per day. We also noted that utilization rates reported for peak periods are generally the same as the utilization rates specified for mobilization. We believe that while the peacetime rate may be a good indicator of what can be accomplished, too great a reliance may be being placed upon it.

Discussions with officials of 11 carriers showed that the required 10 hour per day flying hour rate is the only identified requirement for workload expectations in the event of a CRAF mobilization. Several officials felt that more information is needed to effectively plan for mobilization. They were concerned about knowing how their aircraft would be serviced and maintained and what routes they would travel. Without such data little effective planning can take place to facilitate an orderly and timely flow of aircraft through domestic and foreign airfields. Carrier officials told us they need to know what routes they will fly in various scenarios in order to plan for fuel, crews, spare parts, and maintenance.

MAC officials advised us that specific workload requirements during a national emergency have not been disclosed to the CRAF carriers because they are classified. Instead, MAC advised us that requirements are

designed to fall within the framework of the 10 hour per day utilization rate.

We recognize that classified information must be safeguarded. However, because of the importance of CRAF, we believe more could be done to share with carriers or their key corporate representatives data necessary to permit realistic planning. Unless the carriers know what is expected of them, MAC cannot be sure that they can be effectively mobilized. Any shortcomings in CRAF would also affect plans throughout DOD to move troops and cargo in the early days of a national emergency.

Reserve Status of Flight Crews

In a crisis requiring the mobilization of CRAF, DOD also expects to mobilize the National Guard and military reserves. As a result, those crew members with military commitments will be called to duty and will be unable to participate in CRAF missions. CRAF contracts require that carriers have a minimum of four crews, without reserve or National Guard commitments, for each aircraft committed to CRAF. Each carrier we visited indicated they had four or more flight crews for each aircraft committed to CRAF. However, MAC and the carriers generally do not know to what extent crew members have reserve commitments which could preclude them from being available for CRAF mission assignments. Most carriers visited during our review would not provide or did not know the number of crew members with reserve commitments.

In September 1983, the Air Force Audit Agency reported that MAC did not know the extent that reservists are included in CRAF commitments. MAC has an ongoing project to attempt to identify the extent of reserve commitments by CRAF crew members. Preliminary results indicate that most carriers have more than enough crew members when reservists are excluded.

Security Clearances

Cockpit crew members are required to have security clearances because CRAF crews will receive classified information prior to departing on a mission. They will be given briefings and issued classified codes needed for departure and arrival at bases under wartime conditions. Also, an unspecified number of management and support personnel needed to manage each CRAF carrier are to be cleared.

We found most of the carriers visited had sufficient numbers of crew members with security clearances. However, two of the 11 carriers each

had a shortage of over 300 cleared crew members representing about 75 percent of their requirements.

Geneva Convention Cards

The Geneva Convention requires that identification cards be issued to civilians who may become prisoners of war. According to the Geneva Convention, a civilian taken prisoner is entitled to be given the same treatment and afforded the same privileges as a member of the Armed Forces in the equivalent rank designated on the card. Geneva Convention cards will be issued to civilians assigned or proceeding to a foreign area. These laminated cards include a photograph, fingerprints, and other descriptive data about the individual.

MAC requires CRAF carriers to issue Geneva Convention cards to selected carrier personnel within 48 hours after Stage III CRAF mobilization, but cards may be issued prior to this time at a carrier's option. CRAF carriers are also required to submit an annual report of accountability for the cards.

Of the 11 carriers we visited, five did not issue the cards to individual crew members, four issued cards, and the remaining two had not asked for nor been provided cards by MAC. None of the carriers holding cards had specific plans or procedures to photograph and fingerprint the hundreds of crew members and to issue cards upon a CRAF mobilization.

Table 2.1 shows our estimate of the number of cards needed and the number of cards issued and on hand based on data obtained from the carriers.

Table 2.1: Geneva Convention Card Shortages

Carrier	Geneva Convention Cards			
	GAO estimated minimum needs[a]	Issued by carrier[b]	Blank cards on hand	Estimated shortage
American	1,104	•	100	1,004
Arrow	132	146	54	•
Flying Tiger	240	524	116	•
National	160	•	•	160
Northwest	1,988	•	100	1,888
Pan American	2,484	•	99	2,385
Rich International	96	•	•	96
Transamerica	120	626	170	•
Trans World	1,440	•	100	1,340
United	1,420	•	500	920
World	120	312	137	•
Total	**9,304**	**1,608**	**1,376**	**7,783**

[a]Based on 4 crews (including flight attendants) for each CRAF aircraft; does not include senior lodger, supervisory, or other support personnel.

[b]Includes supervisory and other support personnel in addition to crew members.

Although most carriers do not have a sufficient number of cards issued or on hand, MAC told us that Geneva Convention cards can be issued at any U.S. military base or can be provided to carriers within 48 hours after mobilization.

Because the bulk of the card shortage is with the five largest carriers, we believe efforts should be made to ensure that a sufficient number of cards are on hand and that these carriers have realistic plans to photograph and fingerprint the crew members needing cards.

Navigation Route Kits

MAC contracts and MAC Regulation 55-8 require each CRAF aircraft to have navigation charts and flight information publications, approved by the Federal Aviation Administration, which will provide navigation coverage. Global coverage is required for the long-range international segment so CRAF aircraft will be prepared to fly to any part of the world upon mobilization. They receive the worldwide navigation route kit material from the Defense Mapping Agency. One kit is authorized for each CRAF allocated aircraft, plus any kits required for each carrier's planning staff. Each kit is to include a copy of MAC Regulation 55-8.

In our visits to 11 CRAF carriers, we found that all receive some navigation kits but usually not enough for each CRAF-allocated aircraft and for planning purposes. Table 2.2 summarizes the data obtained from the carriers at the time of our visits.

Table 2.2: Navigation Route Kit Shortages

	Navigation Route Kits		
Carriers	Kits required[a]	Complete or partial kits on hand	Estimated shortage
American	34	34	•
Arrow	3	14	•
Flying Tiger	20	3	17
National	8	7	1
Northwest	53	24	29
Pan American	56	3	53
Rich International	3	3	•
Transamerica	10	26	•
Trans World	34	32	2
United	37	55	•
World	10	13	•
Total	**268**	**214**	**102**

[a]Based on one per aircraft committed to CRAF; does not include kits for planning purposes.

The on hand quantities shown in the schedule include complete and partial navigation kits. Incomplete kits lacked charts, maps and/or MAC Regulation 55-8. MAC officials advised us that navigation kit requirements are updated as carriers notify them of their needs and as there are changes in the number of aircraft committed to the CRAF. They said that they coordinate on a carrier-by-carrier basis and changes are passed to the Defense Mapping Agency. In commenting on a draft of this report DOD said that the shortage of navigational kits has essentially been eliminated.

Communication Requirements

A CRAF mobilization will require continuous communication between MAC and the carriers' operations centers. MAC plans to use commercial telephone, radio, and telegraph to communicate with carriers during a mobilization. MAC also plans to add additional telephone and data transmission capability at their headquarters upon activation.

Representatives of several CRAF carriers told us that, based on experience in providing peacetime airlift service to the military, data communication services at military airfields are not compatible with commercial service needed for receiving flight plan data. Most military bases (Army, Navy, and Air Force) do not have data communication systems linked to the commercial data service used by CRAF carriers.

Flight plans are essential for the safe operation of aircraft and contain data on flight altitudes, speed, and air routes. CRAF flight crews while at military airfields cannot easily communicate with their flight dispatch offices to obtain hard copies of flight plans. They could communicate by telephone but they could not receive the printed data in the same format to which they are accustomed. For example, carrier representatives told us that Norton Air Force Base, California, and Cherry Point Marine Corps Air Station, North Carolina, are military airfields where CRAF flight crews cannot receive flight data directly from company flight dispatch offices. At Norton Air Force Base, one carrier transmits flight data by teletype to its Los Angeles airport facilities where an employee then drives about 60 miles to Norton to provide the flight data to the aircrew. At Cherry Point, flight data is usually sent via Western Union Telex to an off-post facility, such as a motel, for pickup by the flight crew.

Before December 1984, only MAC Headquarters and the alternate headquarters (McGuire Air Force Base, New Jersey) had access to the commercial data service used by CRAF carriers. MAC advised us that in December 1984 and January 1985 additional terminals were installed at Hickam Air Force Base, Hawaii, and Travis Air Force Base, California, and that they are studying the possibility of installing terminals at Ramstein Air Force Base, Federal Republic of Germany. These terminals would allow aircraft being loaded or unloaded at these bases to communicate through the civil system to their operations centers.

MAC officials are concerned that radio systems may also be saturated in a national emergency and are studying the problem to determine deficiencies and suggest solutions. MAC has no current plan to alleviate the problem of hard copies of flight planning data being unavailable.

Vulnerability of Carrier Operations Centers

MAC and CRAF carriers have not planned for the recovery of carrier operations centers in case of disruption during a CRAF mobilization. Our review at the 11 carriers disclosed that 9 have flight operations facilities centralized at one location. Officials of the other two carriers told us they could operate their centers from satellite locations if necessary. We found that only 1 of the 11 carriers had internal procedures addressing disruption caused by sabotage. However, most carrier officials believed that operations could be resumed in a short period of time.

Operations center vulnerability was introduced by MAC at the Mobilization Representatives Conference in September 1984 and further discussions are planned. It was recognized that sabotage is a major concern but MAC indicates that the physical security at airports, where most operation centers are located, would improve during a crisis. MAC officials also advised us that if a carrier's operations center experienced a disruption, that carrier could use facilities of another carrier. MAC expects carriers to work together and do whatever is necessary to meet requirements during an emergency.

Conclusions

The CRAF program is designed to quickly mobilize the nation's commercial airlift resources in emergencies. MAC, as the manager of the CRAF program, is responsible for providing policy and procedural guidance but has little leverage to enforce contractual requirements. There are a variety of conditions that could hinder efficient planning for mobilization. First of all, participating carriers do not know what will be required of them in the event CRAF is mobilized. Instead, the flying hour rate is contractually specified for a CRAF mobilization. Some carriers currently perform up to and above the specified rate during peak periods, thus indicating what is possible in an emergency. However, specific workload data is not provided to carriers and they do not know how or where their aircraft will be used—important information needed for effective planning for the early phases of an emergency.

Large scale testing of CRAF is recognized as not being practical but MAC has not included direct contact with CRAF carriers in any recent command post exercises.

Improvements are also needed in carriers' compliance with contractual requirements to identify crew members meeting requirements for security clearances, and to issue Geneva Convention cards and navigation route kits.

Recommendations

We recommend that the Secretary of Defense require MAC to

- provide typical workload information to key carrier representatives and evaluate the carriers' abilities to perform their missions;
- assess CRAF capability using data obtained from the carriers and from field exercises and simulations;
- evaluate CRAF carriers' efforts to meet contractual requirements, such as number of qualified crews with security clearances and the availability of Geneva Convention cards and navigational route kits; and
- consider the need for additional data communications capabilities at key military airfields for use by CRAF carriers during a national emergency.

Agency Comments and Our Evaluation

In commenting on a draft of this report (see app. II), DOD said it agreed in principle with our conclusions and concurred in most of our recommendations.

DOD said that while some workload information can be provided to the carriers, discrete war planning data cannot. We agree and that is why we are confining our recommendation to "typical" workload data. We believe that actions such as DOD recently took in supplying notional workload information concerning a Pacific theater scenario is a positive move to more realistic planning. However, we believe it is important that the notional data shared with the carriers include information on the number and kinds of aircraft to be flown in a representative period of time. Also, the data should be furnished to carriers responsible for operations in all likely scenarios.

DOD partially concurs with our recommendation that MAC evaluate CRAF carriers' efforts to meet contractual requirements. DOD said it presently has an ongoing program where CRAF representatives and MAC officials meet periodically (formally, once a year) to address problems and remedy shortfalls such as those identified by us, i.e., security clearances, Geneva Convention cards, etc. Therefore, DOD said it does not fully concur that further evaluations should be required. The DOD, while agreeing that pursuing the recommendation is a valid course of action, said that demanding mandatory compliance with administrative requirements may prove detrimental to the CRAF program.

We are not recommending further evaluations, but rather that DOD's ongoing program give closer attention to carrier efforts to comply with contractual requirements. As we have stated on page 15 of this report we recognize that, in peacetime, there is a delicate balance between MAC

and the carriers and too great an emphasis on enforcement of requirements or excessive administrative demands could have a negative impact on the program. However, we also pointed out that the same type problems continue to surface each year. Therefore, we believe our recommendation is valid and we encourage MAC to do all that is practical to obtain compliance from all carriers. This may be accomplished in MAC's ongoing program.

Assured Support at Foreign Airfields Is Needed

Successful operation of the CRAF program during a national emergency is dependent upon CRAF aircraft being serviced, maintained, and repaired at foreign airfields. Aircraft must receive servicing prior to returning to the United States to perform additional missions. MAC plans for CRAF aircraft to obtain this support at foreign airfields through the use of senior lodgers. A senior lodger is a CRAF carrier which generally has the greatest support capability and/or the largest number of aircraft that transit an airfield. We found that CRAF aircraft may not get the support needed during wartime, although in some areas efforts are underway to provide better assurance of adequate support.

Senior Lodger Support Role at Foreign Airfields

The senior lodger system is designed to coordinate repairs and services to CRAF carriers at foreign and domestic airfields when they are unable to obtain such services from their own resources. Selected by MAC with carrier consent, senior lodgers play an important part in supporting CRAF upon mobilization. The senior lodger acts as primary agent for any support services required by CRAF aircraft, whether specifically providing them or acquiring them through alternative sources. Services provided or arranged by the senior lodger consist of ground support, fuel, flight operations, traffic services, communications, supplies, maintenance, and crew member needs. The senior lodger may also be requested occasionally to provide or obtain services for DOD aircraft.

Senior lodger functions are currently the responsibility of three CRAF carriers at 22 foreign airfields (see app. I). Senior lodgers can be activated individually by MAC as needed. CRAF aircraft will not normally be serviced at military onload or offload locations. This will be done at nearby commercial airfields by the operating carrier or designated senior lodger.

Support by Senior Lodgers Is Uncertain

Discussions with corporate headquarters' officials at two carriers responsible for 13 of 22 senior lodgers at foreign airfields disclosed they were not sure if they could meet senior lodger responsibilities when activated. They believed they were required to provide support services but questioned whether they could comply while operating in a foreign country under wartime conditions.

None of the officials visited at foreign airfield locations had been informed by MAC or their corporate offices of the estimated number and types of aircraft transiting their location upon activation. Most officials appeared to have little knowledge of what would be expected of them.

One senior lodger official believed operations during CRAF mobilization would not differ significantly from normal business operations. They would be doing the same thing in both instances—servicing aircraft. However, the official advised us that variable service and workload factors could significantly affect the number of aircraft handled. The time required to service each flight, and hence the total number of flights that could be handled in one day, depends heavily on the type of servicing required.

We asked senior lodger officials to provide estimates of the number of aircraft they could service in a national emergency. The officials said they could not provide realistic estimates without knowing specific service requirements. Moreover, they said that under MAC Regulation 55-8 they are expected to provide a broad range of services but several key factors would affect their ability to service aircraft. For example, the time required varies depending upon whether they are expected to provide only routine aircraft maintenance or whether they are to also provide onloading/offloading passengers and cargo.

Logistics Management Institute Study

In its April 1985 report, "Civil Reserve Air Fleet Support Program," the Logistics Management Institute expressed the opinion that OSD should strengthen the senior lodger system and make sure it is capable of supporting CRAF operations.

It was the Institute's opinion that, among other things, the Assistant Secretary of Defense (Manpower, Installations, and Logistics) should improve support of CRAF during mobilization by:

- Strengthening the senior lodger system. This effort should concentrate on the central region of the North Atlantic Treaty Organization because of its strategic importance, and the results should be applied to CRAF stations and operations worldwide.
- Strengthen the capability of CRAF to support the recently created Central Command.
- Evaluate the need for DOD policy guidance on CRAF support.

DOD stated that the Institute, in its more recent work, has concluded that host nation support provides the most credible method to satisfy CRAF carrier requirements in foreign countries. The Institute's report on this phase of its work is scheduled for release in June 1986.

Improvements Needed in Annual Site Survey

Our visit to senior lodger locations at foreign airfields showed that the only exposure most senior lodger personnel have to the CRAF program is the submission of an annual site survey required by MAC. The site survey requires information about total airport servicing facilities, numbers of support equipment, and hotel accommodations within the general airport vicinity. It does not contain realistic estimates by the senior lodgers as to the number and type of aircraft that could be serviced at given times.

According to officials at two senior lodger locations, the site surveys do not appear to be useful planning instruments for them or MAC. One of the officials said it had some benefits in the sense that it helped identify internal organizational responsibilities. None of the seven senior lodger officials had received any feedback or questions regarding the surveys. Two senior lodger officials believed more interaction with MAC would be useful. Both believed that MAC would benefit from a better understanding of their capability at foreign airfields.

When completing the survey, senior lodgers do not report data consistently. At only one location was there a clear identification of what equipment was owned as well as what equipment was available from other sources. Officials at two senior lodger locations interpreted the availability of equipment to refer to what was available at the entire airport. Officials at another location merely indicated equipment availability but provided no data on the amount of equipment.

Officials at only two of the seven senior lodger locations visited had been contacted by MAC regarding CRAF, aside from completing the site survey. One official advised us that, in 1981, his corporate office had requested comments on revisions to the regulation on CRAF operations. MAC officials visited another senior lodger location in March 1984 to participate in a senior lodger site survey. This was the first survey that included participation by MAC officials. MAC officials advised us that as a result of their visit, the senior lodger site survey is being redesigned. The new survey will require data on senior lodger support capabilities in terms of the number and type of aircraft that could be serviced and will identify equipment owned as well as available from other sources. MAC officials also advised us that an evaluation of the survey data will be furnished to the senior lodgers beginning with the use of the new form.

Host Nation Support Agreements and CRAF

Host nation support embodies the concept that allies of the United States can provide much of the support needed for CRAF and is based on cooperative agreements. Negotiating host nation support for CRAF is part of that process. Final agreements have not been completed to satisfy specific support requirements at foreign airfields. The senior lodger role at foreign airfields is vital and will be strengthened when agreements are finalized with host nations.

CRAF support requirements addressed in host nation agreements are developed by MAC. MAC officials told us that support requirements for CRAF in Europe, for example, are coordinated with U.S. Air Forces Europe located at Ramstein Air Force Base. That command and the European Command represent MAC in the negotiation process with host nations.

Our review showed that MAC efforts to coordinate CRAF support requirements in Europe have been limited until recently. In July 1983, MAC officials visited U.S. Air Forces Europe to provide a better understanding of the CRAF program and the senior lodger role. This role was also discussed with carrier representatives attending the November 1983 CRAF mobilization representatives conference. Carriers expressed concern over the use of foreign nationals for unscheduled maintenance and engine changes, and the use of critical parts.

MAC and the U.S. Air Forces Europe have been working on developing detailed support requirements for CRAF. In December 1984, MAC recommended that a meeting, to include representatives of CRAF carriers, be held in Europe to work on a statement of requirements for CRAF support. This meeting was held on May 29 and 30, 1985, and an agreement in principle has been reached between the United States and the Federal Republic of Germany. It appears that this agreement and similar agreements being negotiated with other nations should improve operations in an emergency. We also understand that specific workload planning data has been authorized for release to the Federal Republic of Germany to support the CRAF carrier who will operate in that region.

In addition to the above efforts, MAC officials are involved in several working groups and committees of the North Atlantic Treaty Organization related to airlift. The senior lodger role is included in the deliberations with these groups.

Our limited review of four host nation support agreements being negotiated by the European Command showed that CRAF support is mentioned

when plans are discussed with European host countries. In some cases, CRAF is specifically mentioned, and in others, we were advised that it is included in terms such as "all United States controlled aircraft," referring to both military and commercial aircraft. However, MAC officials told us that no host nation support agreements have been completed that include specific maintenance support services to be provided to CRAF aircraft at foreign airfields.

Officials with the U.S. Forces Japan told us that neither the CRAF program nor its requirements have been discussed with the Government of Japan. They told us that, in principle, the United States has access to all civil airfields in Japan, however, current political sensitivities have precluded them from receiving positive assurances on using civil facilities.

Conclusions

Senior lodgers are necessary to ensure that CRAF aircraft will be supported at foreign airfields during war. Without such support, DOD's ability to move combat personnel and supplies during a national emergency would be impaired.

Our review showed that senior lodger support capability is questionable as senior lodger officials do not know the service requirements of MAC. MAC does not provide carriers with senior lodger responsibilities the anticipated aircraft workload at foreign airfields which is necessary to plan for support needs upon mobilization. In addition, officials at senior lodger locations were limited in their exposure to CRAF and its concept of operation.

The data shown in annual senior lodger site surveys do not accurately depict the capability of a senior lodger to support CRAF aircraft. However, MAC is planning to require additional information with a revised survey format.

Our review of host nation agreements in Europe showed that specific CRAF support should be included when detailed implementing plans are negotiated with European host countries. To date, however, details that address specific support services to be provided CRAF aircraft are not complete for specific airfields. Host nation support is not being discussed with the Government of Japan.

Recommendations

The support of CRAF aircraft at overseas locations during an emergency is critical to the successful operation of CRAF when mobilized. To ensure

success, MAC should know what the senior lodger facilities will provide in an emergency and the senior lodgers should know, in general, what will be expected of them. We recommend the Secretary of Defense require MAC to

- provide carriers responsible for supporting CRAF aircraft overseas with general workload data on the numbers and types of aircraft to be supported at each foreign airfield for their use in planning the efficient movement of combat personnel and cargo, and
- fully consider CRAF senior lodger support requirements in negotiating host nation support agreements.

Agency Comments and Our Evaluation

DOD partially concurred with our findings and concurred with our recommendations. DOD said that while the senior lodger concept remains an important element in the CRAF program, it is exploring other avenues to enhance support to CRAF operations. It is expanding use of host nation support agreements to satisfy CRAF carrier requirements in foreign countries. DOD stated it would also provide notional or order of magnitude information to the carriers. We agree with this course of action.

We agree that, where possible, host nation support agreements would be a most desirable means of supporting CRAF carriers. Until such agreements are formalized, it is important that the responsible carriers receive as much information as is possible concerning their expected workloads.

Senior Lodger Locations at Foreign Airfields

Responsible Carrier	Location
Northwest	Copenhagen, Denmark Okinawa, Japan Prestwick, Scotland Seoul, Korea Tokyo, Japan
Pan American	Amsterdam, Netherlands Ankara, Turkey Bangkok, Thailand Brussels, Belgium Frankfurt, Germany Keflavik, Iceland London (Gatwick), England Manila, Philippines Shannon, Ireland
Trans World	Athens, Greece Barcelona, Spain Cairo, Egypt Lisbon, Portugal London (Heathrow), England Madrid, Spain Paris, France Rome, Italy

Comments From the Assistant Secretary of Defense (Acquisition and Logistics)

THE OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301-8000

ACQUISITION AND LOGISTICS

LM-TP

19 FEB 1986

Mr. Frank C. Conahan
Director, National Security and
International Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the November 1, 1985, General Accounting Office (GAO) draft report, "Civil Reserve Air Fleet: More Can Be Done To Assure Responsiveness Of This Valuable Asset In A National Emergency" (GAO Code 392024 - OSD Case No 6872).

The Department agrees that the Civil Reserve Air Fleet (CRAF) is a key ingredient in the Nation's ability to mobilize, project power and deploy combat forces, and that additional management attention is required to enhance the program. The Department will take steps to address the specific recommendations set forth in the draft report, and will continue to monitor and support initiatives of the airlift single manager and program manager to strengthen this important program.

Specific comments relating to the report findings and recommendations are enclosed. The Department appreciates the opportunity to comment on the GAO draft report.

Sincerely,

James P. Wade, Jr.

Enclosure

GAO DRAFT REPORT - DATED NOVEMBER 1, 1985
(GAO CODE 392024) - OSD CASE 6872

"CIVIL RESERVE AIR FLEET: MORE CAN BE DONE TO ASSURE RESPONSIVENESS OF THIS VALUABLE ASSET IN A NATIONAL EMERGENCY"

* * * * *

RESPONSE TO THE GAO DRAFT REPORT

FINDING A: Management of CRAF. The GAO reported that the Air Force's Military Airlift Command (MAC) manages the Civil Reserve Air Fleet (CRAF) program, which consists of 281 long-range commercial aircraft committed to CRAF by 19 carriers. The GAO further reported that the CRAF program provides DoD with such emergency capacity without having to buy aircraft, pay personnel costs, or fly and maintain the aircraft during peacetime. Such costs could amount to billions of dollars annually. Carriers participating in the program receive no compensation unless mobilized. The GAO found that it is uncertain if CRAF can effectively respond to DoD's mobilization requirements because of several shortcomings including the management of CRAF. Although MAC is the manager of the CRAF program, the GAO further found that the Office of the Secretary of Defense involvement is limited and other than the Memorandum of Understanding between the Departments of Transportation and Defense, regarding the use of civil aircraft, there is no specific involvement of OSD in establishing or reviewing CRAF program policy and guidance. The GAO noted that recently, OSD has begun to take action to monitor MAC's efforts to have CRAF ready for mobilization. Since participation in the CRAF program is more or less voluntary and the leverage of MAC is limited, and since there is no direct compensation to the airlines until mobilized, GAO concluded that MAC feels it can only suggest, rather than direct, compliance in many instances. The GAO further concluded that for these reasons and because of the importance of the program, efforts should be made to identify and remove any uncertainties that could hinder CRAF's efficient mobilization. (pp. i, 10-11, GAO Draft Report)

Now on pp. 2, 14, and 15.

DoD Response: Concur. The Department agrees that there are shortcomings in the current CRAF program (addressed in the responses to Findings B through H), and that there should be efforts to reduce uncertainties associated with the program. As the GAO pointed out, the Office of the Secretary of Defense (OSD) is monitoring the MAC efforts to have CRAF aircraft ready for mobilization needs. Ongoing MAC efforts, together with monitoring by the Air Force and OSD should be adequate to ensure this result. In this regard, the shortfalls identified by the GAO should not, in themselves, significantly impair determinations of either CRAF mobilization needs, or the ability to use CRAF completely. Although CRAF does tend to be a

voluntary program without direct compensation as the GAO pointed out, there is statutory authority for the Department of Transportation (DoT) to allocate civil transportation resources for mobilization purposes, and there is a DoD/DoT Memorandum of Understanding to implement the statutory authority. Furthermore, there is a substantial incentive for carriers to participate during peacetime, since they share in the DoD transportation business in committing airlift resources to Stages I and II of the program. This business amounted to over $400 million in FY 1985. On the other hand, it must be recognized that efforts to impose mandatory compliance with administrative requirements on CRAF carriers could prove to be detrimental to the program. The DoD, therefore, will have to continue to balance its objectives related to CRAF.

FINDING B: Testing of CRAF. The GAO noted it is recognized that it is impractical to fully test the ability of CRAF to respond to a national emergency. The GAO, however, found that only very limited testing is being done. The GAO reported testing conditions of two types: (1) command post exercises, which are simulations of conditions using computers, and (2) annual field training exercises. The GAO further found that command post exercises, in March 1973 and April 1976, were used to test the current CRAF mobilization procedures; as a result, problems identified during these command post exercises were corrected and new procedures developed. The GAO also found, however, that since 1982, seven additional command post exercises have been completed, but CRAF carriers did not participate because these exercises were primarily for the benefit of MAC in managing the flow of airlift missions. Concerning field training exercises, the GAO observed that they are not specifically designed to test the ability of CRAF to respond to a mobilization, and the CRAF aircraft used are provided under regular peacetime airlift arrangements. The GAO concluded that MAC testing of CRAF through command post exercises or field exercises has been limited. The GAO also concluded that MAC has not included CRAF in any recent command post exercise. (pp. ii, 11-23, GAO Draft Report)

Now on pp. 2 and 15.

DoD Response: Concur. MAC officials have determined that reinstituting exercises similar to the Scarf exercises in 1973 and 1976 would benefit both MAC and the carriers to assess the CRAF program. An exercise program is under development at MAC and will be implemented in FY 1987 to test the ability of CRAF carriers to respond to a mobilization.

FINDING C: Workload Data. The GAO reported that MAC contracts with CRAF carriers specify a minimum use rate of 10 hours per day upon mobilization. The GAO found, however, that several carrier officials said that more workload information is needed to effectively plan for mobilization. According to GAO, these officials were concerned about knowing how their aircraft would be used, i.e., serviced, maintained, and routes they would travel--without such data little effective planning can take

Now on pp. 16 and 17.

place to facilitate an orderly and timely flow of aircraft through domestic and foreign airfields. Carrier officials also told GAO that they need to know what route they will fly in various scenarios to plan for crews, fuel, spare parts, and maintenance. According to GAO, MAC officials advised that specific workload requirements during a national emergency have not been disclosed to the CRAF carriers because they are classified. The GAO recognized that classified information must be safeguarded; however, the GAO concluded that unless the carriers know what is expected of them, the carriers cannot realistically plan for mobilization, and MAC cannot be sure that the carriers can be efficiently mobilized. The GAO also concluded that the limited MAC testing does not make typical mobilization workload requirements known to the CRAF carriers. The GAO further concluded that any shortcomings in CRAF would also affect plans throughout DoD to move troops and cargo in the early days of a national emergency. (pp. 13-15, 22, GAO Draft Report)

DoD Response: Concur. The Department agrees that providing some workload information to the carriers may prove helpful to both DoD and carrier planning. MAC officials have recently provided notional information relating to CRAF activities in a Pacific theater scenario to illustrate theoretical workload. This information approximates wartime workload in terms of cargo and passenger throughput and time phased aircraft departures, arrivals, and in-transit operations. It is important, however, to understand that discrete war planning data is not shared with the carriers. The dissemination of details of Operations Plans is controlled by Joint Chiefs of Staff Memorandum of Policy 39 and it is unlikely that actual planning data will be provided to the civil carriers. While recognizing that mobility plans by nature are not static, nevertheless, providing notional information to the carriers may assist them in refining CRAF activation requirements. The Department views the contractual commitment that CRAF carrier aircraft average 10 hours of utilization per day as an acceptable gauge for the carriers and the Department to assess manpower, consumable, and maintenance needs. Adequate use of warning time and the time allocated to attain CRAF Stage III activation would afford some opportunity to correct system imbalances which are likely to exist at the time of CRAF activation.

FINDING D: Improvements Needed in Carriers' Compliance With Contractual Requirements. The GAO reported that MAC contracts require that carriers have a minimum of four crews without military reserve commitment. The GAO found, however, that neither MAC nor the carriers know to what extent crew members have reserve commitments. On the other hand, GAO reported that preliminary results of an ongoing MAC project indicate most carriers have more than enough crew members when reservists are excluded. The GAO further found that, although MAC contracts require CRAF cockpit crew members to have security clearances, two of the 11 carriers visited had a shortage of over 300 cleared

crew members, representing about 75 percent of their requirements. According to GAO, MAC contracts also require CRAF carriers to issue Geneva Convention cards to selected carrier personnel within 48 hours after Stage III CRAF mobilization, but cards may be issued prior to this time at the carriers' option. Of the 11 carriers visited, GAO also found that (1) 4 carriers issued cards to individual crew members, (2) 5 carriers did not issue cards, (3) the remaining two carriers had not asked for, or been provided cards by MAC, and (4) none of the carriers holding cards had specific plans or procedures to photograph and fingerprint the hundreds of crew members, and to issue the cards upon a CRAF mobilization. Moreover, GAO estimated the card shortage was 7,793 cards. Because the bulk of the card shortage is with the 5 largest carriers, GAO concluded that efforts should be made to insure that sufficient cards are on hand, and that these carriers have realistic plans to photograph and fingerprint the crew members needing cards. Although MAC contracts require each CRAF aircraft to have worldwide navigation route kits, GAO found all (carriers) receive some navigation kits but usually not enough for each CRAF-allocated aircraft and for planning purposes--some of the largest carriers have shortages of navigation kits. The GAO concluded that improvements are needed in carriers' contractual requirements to identify crew members meeting requirements for security clearances, and to issue Geneva Convention cards and navigation route kits. (pp. 15-19, and p. 22, GAO Draft Report)

Now on pp. 16 to 20.

DoD Response: Concur. Administration associated with the CRAF program noted in this finding continues to be a problem. However, some corrective measures have been undertaken. As noted by the GAO, MAC has an ongoing project to track CRAF carrier crewmember Reserve requirements. MAC officials report that the shortage of navigation kits has been reduced from 102 to 24, and the single carrier (Northwest Orient Airlines) represented by this shortage operates worldwide using Jeppesen navigation kits which are similar in design and content to those navigation kits provided by MAC. In view of this, MAC officials agree with the carrier that the number of navigation kits provided by MAC is sufficient. Security clearances for crew members and issuing Geneva Convention cards remain problem areas, although some progress has been made to reduce these program shortfalls. Officials at MAC have accelerated a dialogue with the civil air carriers to satisfy shortages of blank Geneva Convention cards. These same officials are investigating the use of Government furnished cameras and fingerprinting kits to enable more responsive issue of these cards. Results of this review will be completed by FY 1987. Periodic meetings of MAC and carrier officials address the need to keep security clearances current. However, the dynamics of CRAF carrier personnel actions, frequent rotation by crewmembers among CRAF and non-CRAF committed aircraft, administrative cost burden and investigative processing times hinder efforts to achieve the goal of security clearances for each CRAF crewmember.

FINDING E: Effective Communications Between Military Airfields With Commercial Services Could Be Hindered. The GAO found, through discussions with representatives of several CRAF carriers, that data communications services at military airfields are not compatible with commercial service needed for receiving flight plan data. This exists because most military bases do not have data communication systems linked to the commercial data service used by CRAF carriers. The GAO further found that CRAF flight crews, while at military airfields, cannot easily communicate with their flight dispatch offices to obtain hard copies of flight plans. For example, at Cherry Point Marine Corps Air Station, North Carolina, flight data is usually sent via Western Union Telex to an off-post facility, such as a motel, for pickup by the flight crew. The GAO reported that only MAC Headquarters and three Air Force bases had access to the commercial data service used by the CRAF carriers. The GAO also found that MAC officials are concerned that radio systems may also be saturated in a national emergency and are studying the problem. The GAO concluded that effective communications between the aircraft and operations centers could be hindered in a mobilization by the incompatability of data communications services. (pp. iii, 19-20 GAO Draft Report)

Now on pp. 4, 20, and 21.

DoD Response: Concur. See response to Recommendation 4.

FINDING F: Vulnerability Of Carrier Operations Centers. The GAO found that MAC and CRAF carriers have not planned for the recovery of carrier operations centers in case of disruption during a CRAF mobilization. The GAO further found that (1) 9 of the 11 carriers reviewed have flight operations facilities centralized at one location, (2) two carriers could operate from satellite locations, and (3) only one of the 11 carriers had internal procedures addressing disruption caused by sabotage. The GAO noted that while it was recognized that sabotage is a major concern, MAC indicated that the physical security at airports, where most operations centers are located, would improve during a crisis, and that if a carrier's operations center experienced a disruption, another carrier's facility could be used. The GAO concluded that the vulnerability of a carriers operation's center does not present too much of a problem in that MAC expects carriers to work together and do whatever is necessary to meet requirements during an emergency. (pp. 20-21, GAO Draft Report)

Now on p. 22.

DoD Response. Concur. The Department agrees that carrier operations centers are somewhat vulnerable; however, as the GAO concludes, this does not present much of a problem as carriers will work together to meet emergency requirements.

FINDING G: Assured Senior Lodger Support at Foreign Airfields Is Needed. The GAO reported that the senior lodger system is designed to provide repairs and services to CRAF carriers at foreign and domestic airfields when they are unable to obtain such services from their own resources--plays an important role

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in supporting CRAF upon mobilization. However, the GAO found that CRAF aircraft may not get the support needed during wartime. Corporate officials responsible for 13 of 22 senior lodgers at foreign airfields disclosed that they were not sure if they could meet the responsibilities if activated under wartime conditions in a foreign country. The GAO further found that (1) none of these officials had been informed by MAC or their corporate offices of the estimated numbers and types of aircraft transiting their location upon activation, (2) these officials had little knowledge of what would be expected of them, and (3) they were limited in their exposure to CRAF and its concept of operation. The GAO noted that the Logistics Management Institute Study, April 1985, expressed the opinion that OSD should strengthen the senior lodger system and make sure it is capable of supporting CRAF operations. The GAO also found that the data found in the annual senior lodger site surveys does not depict the capability of a senior lodger's ability to support CRAF aircraft, and that MAC is planning to require additional information with a revised survey format. The GAO concluded that senior lodgers are necessary to ensure that CRAF aircraft will be supported at foreign airfields during war, and without such support, DoD's ability to move combat personnel and supplies in a national emergency would be impaired. (pp. 24-28, GAO Draft Report)

Now on pp. 26 to 28.

DoD Response: Partially Concur. While the senior lodger concept remains an important element in the CRAF program, the Department is exploring other avenues to enhance support to CRAF operations. The Department is expanding host nation support agreements to include support to CRAF carriers. The Logistics Management Institute has examined support arrangements for civil carriers within the European Central Region and concluded that host nation support provides the most credible method to satisfy CRAF carrier requirements in foreign countries. During the 1985 CRAF Mobilization Representative Conference, MAC officials voiced support for expanded use of host nation support arrangements as they relate to CRAF operations. While some order of magnitude workload data may be provided to the senior lodger, the same concerns on providing workload information apply as noted in the response to Finding C. It should be noted, however, that the continual changes of civil fleet size and composition and the related commitment of a fraction of that resource to the CRAF, coupled with the uncertainties surrounding any movement of military forces create a difficult environment to project meaningful senior lodger workload. Nevertheless, the Department is encouraged by the fact that MAC officials are taking action to improve the dialogue among carrier and senior lodger personnel with appropriate military officials and agrees with the GAO Draft Report that enhancing these communications channels improves the effectiveness of the CRAF program.

FINDING H: Details Of Host Nation Support Agreements And CRAF Are Limited. The GAO reported that host nation support embodies the concept that allies of the United States can provide much of the support needed for CRAF and is based on cooperative

agreements--negotiating host nation support for CRAF is part of that process. Although CRAF support is mentioned when plans are discussed with European host countries, the GAO found that final agreements have not been completed to satisfy specific support requirements at foreign airfields. The GAO also found that further efforts to coordinate CRAF support requirements in Europe have been limited until recently. The GAO noted that MAC and the U.S. Air Forces Europe have been working on developing detailed support requirements for CRAF. At a meeting held on May 20-30, 1985, an agreement in principal was reached with the Federal Republic of Germany. The GAO concluded that this agreement, and others being negotiated, should improve operations in an emergency. The GAO further concluded that the senior lodger role at foreign airfields is vital and will be strengthened when agreements are finalized with host nations. (pp. 28-30, GAO Draft Report)

Now on pp. 29 and 30.

DoD Response: Concur. The total CRAF program, not merely senior lodger operations, will be supported by expanding the host nation support agreement program. As the Department negotiates host nation support agreements with allies, the need to support civil air carriers during emergencies will be addressed on a case-by-case basis. This is underway within Europe and will be expanded to other geographic areas.

RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended the Secretary of Defense require that typical workload information be provided to key carrier representatives and that evaluations be made of the carriers' ability to perform these missions. (p. 22, GAO Draft Report)

Now on p. 23.

DoD Response: Concur. The Department is very reluctant to provide deliberate planning information to the CRAF carriers and is constrained from sharing Operations Plans information with them. Recently, however, MAC provided the carriers some notional workload data, which approximates wartime cargo and passenger movement requirements and aircraft operations. In addition, in 1985, MAC provided the carriers notional workload information related to civil airlift resources in a Pacific theater scenario; this information should adequately resolve the issue involved in this GAO recommendation.

RECOMMENDATION 2: The GAO recommended the Secretary of Defense require that systematic assessments of CRAF be made using data obtained from the carriers and from field exercises and simulations. (p. 22, GAO Draft Report)

Now on p. 23.

DoD Response: Concur. The Department plans to reinstitute CRAF exercise simulations beginning in FY 1987 and will make systematic assessments of CRAF based on simulation results.

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Now on p. 23.

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense require that evaluations be performed to ensure that CRAF carriers meet contractual requirements, such as number of qualified crews with security clearances and the availability of Geneva Convention Cards and navigational route kits. (pp. 22-23, GAO Draft Report)

DoD Response: Partially Concur. The Department presently has an ongoing program where CRAF representatives and MAC officials meet periodically (formally, once per year) to address problems and remedy shortfalls such as those identified by the GAO, i.e. security clearances, Geneva Convention Cards, etc. Therefore, the Department does not fully concur that further evaluations should be required. Many of the carriers contractually participate in the CRAF program on a voluntary basis, and the imposition of more rigid administrative requirements may result in loss of CRAF committed resources. One major carrier has recently rejoined CRAF after an absence caused, in part, by rigid administrative requirements. The Department, while agreeing that pursuing the recommendation is a valid course of action, realizes that demanding mandatory compliance with administrative requirements may prove detrimental to the CRAF program.

Now on p. 23.

RECOMMENDATION 4: The GAO recommended the Secretary of Defense require that consideration be given to the need for additional data communications capabilities at key military airfields for use by CRAF carriers during a national emergency. (p. 23, GAO Draft Report)

DoD Response: Concur. The Department agrees that communications enhancements are important to CRAF viability. The CRAF program managers within MAC and the Department of the Air Force are exploring expanded communications interface between the civil air carriers committed to CRAF and military authorities responsible for CRAF operations in an emergency. Beyond the explicit recommendation to enhance ground communications at military airfields, the Air Force is programming secure data and facsimile transmission linkages with carrier operations centers and improvements to CRAF aircraft on-board communications. Funding for the first ten secure facsimile processors has been approved and budgeted. Further enhancements are being evaluated by the MAC program evaluation group.

Now on p. 31.

RECOMMENDATION 5: The GAO recommended that the Secretary of Defense strengthen the program by requiring carriers responsible for supporting CRAF aircraft overseas to be advised of general workload data in regard to the numbers and types of aircraft to be supported at each foreign airfield in order that they can plan for the efficient movement of combat personnel and cargo. (p. 31, GAO Draft Report)

DoD Response: Concur. The Department will provide order of magnitude information on estimated passenger and cargo throughput

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and aircraft operations consistent with the response to Findings C and G and Recommendation 1 of the draft report.

RECOMMENDATION 6: The GAO recommended that the Secretary of Defense strengthen the program by requiring CRAF senior lodger support requirements to be fully considered in negotiating host nation support agreements. (p. 31, GAO Draft Report)

Now on p. 31.

DoD Response: Concur. The Department agrees that the entire CRAF program will benefit from enhancements to the host nation support agreement program. Accordingly, those components responsible for host nation support agreement negotiations are addressing CRAF support on a case-by-case basis.

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